

M Series XL Battery



ZOLL XL Smart Battery

ZOLL M Series

9650-0221-01 Rev. D

The issue date or revision level for this operation guide is shown on the front cover.

ZOLL, XL Battery, Smart Battery, Base PowerCharger^{4x4}, Base Powercharger^{1x1}, and M Series are trademarks of ZOLL Medical Corporation.

© 2004 by ZOLL Medical Corporation. All rights reserved.

Product Description

The ZOLL XL Battery is a 4.5 AH lead acid battery pack intended for use in appropriately configured M Series and M Series CCT defibrillators. It is available as a Smart Battery or Smart Ready Battery. Please see the *Smart Battery Operator's Guide* for additional information on Smart Battery functionality.

NOTE: The XL battery is NOT intended for use in ZOLL 900/1200/1400/1600/1700/2000 series units. See the "Defibrillator Compatibility" section below for information on M Series use.

Warnings!

- Follow all recommended maintenance and operating instructions for the XL Battery and associated ZOLL charging/testing systems. If a problem or question arises, contact Technical Service. Do not use the XL Battery until it has been inspected, tested, and recalibrated by the appropriate personnel and you have been adequately trained in the proper use of the XL Battery.
- Locate the XL Battery and ZOLL resuscitation devices where they cannot harm the patient or user if they fall.
- Under certain conditions, it is possible for small amounts of hydrogen gas to be released during charging of the battery pack. This may present a hazard.
- Do not immerse or set the XL Battery in fluid.
- Do not use alcohol or ketones (MEK, acetone, etc.) on the XL Battery. Do not autoclave the XL Battery.
- The XL Battery is protected against interference from radio frequency emissions typical of two way radios and cellular phones (digital and analog) used in emergency service/public safety activities. Users of the XL Battery should assess the device's performance in their typical environment of use for the possibility of radio frequency interference from high power sources.
- Keep a fully charged spare battery pack available at all times with the Monitor/Defibrillator. Replace the battery immediately upon low battery message.
- Do not install batteries into Monitor/Defibrillators when storage may exceed 90 days. Battery damage may occur.
- Do not use the XL Battery if the case is cracked or broken.
- When charging a XL Battery pack in a Base PowerCharger^{4x4} or Base PowerCharger^{1x1} unit, ensure unit is labeled "XL Battery Ready" otherwise the battery cannot be charged to full capacity and operating life may be reduced.
- ZOLL charging/testing systems used with the XL Battery should be calibrated or tested periodically using the appropriate Service Manual Test Check Out procedures.
- To dispose of the battery properly, place it in an acid resistant container. Dispose of the battery in accordance with federal, state, and local regulations. Do not incinerate batteries. Ship the batteries to a reclamation facility for the recovery of metal and plastic compounds as the proper method of waste management.
- Use of ZOLL PD 4410 batteries with M Series CCT or M Series units configured to operate with XL batteries is not recommended. Although the PD 4410 battery can be used to power such units in an emergency situation, the period from low battery warning to unit shut down will be substantially shortened. See the *M Series Configuration Guide* (9650-0201-01) for additional information.

General Information

Defibrillator Compatibility

M Series units must have software version 30.00 or higher and be outfitted with the appropriate handle assembly. New M Series units may be ordered with the XL Battery option. Older M Series units may be upgraded if the current software version is 20.00 or higher. All M Series CCT units are XL Battery-ready.

The XL Battery is not intended for use in ZOLL 900/1200/1400/1600/1700/2000 series units.

Charger Compatibility

The XL Battery is only compatible with ZOLL Base PowerCharger^{4x4} or Base PowerCharger^{1x1} units labeled “XL Battery Ready.”

Older ZOLL Base PowerCharger^{4x4} or Base PowerCharger^{1x1} units may be upgraded.

All XL Battery ready chargers are backward compatible with the PD4410 battery pack.

Battery Maintenance

Test batteries regularly. At a minimum, ZOLL recommends testing batteries every three months. For additional information on battery maintenance, refer to the ZOLL document, *Battery Management Program* (#9650-0019).

Environmental Specifications

Temperature	0°C to 50°C (operating)
	15°C to 35°C (optimal battery charging)
	-40°C to 70°C (storage)
Humidity	5% to 95% (relative humidity, non-condensing)

Operating Note

The XL Battery may feel warm to the touch following an excessive number of defibrillation discharges at maximum energy.

Charge Time

The XL battery charge times are as follows:

Charging Device	Maximum Charge Time
M Series - unit plugged in and OFF	7.2 hours
M Series - unit plugged in and in use	43 hours
Base PowerCharger ^{4x4/1x1} Quick Charge	6 hours
Base PowerCharger ^{4x4/1x1} Auto Test	12 hours

Cleaning

Clean the ZOLL XL Battery with a soft damp cloth and mild soap.

CAUTION! Do not immerse or set battery in fluids; do not use alcohol, ketones (MEK, acetone, etc.); and do not autoclave.

Upgrade Kits

M Series units with software version 20.00 and higher may be upgraded for use with the XL Battery. If the unit is equipped with an Extreme Pack II, an upgrade will be required for the Extreme Pack as well.

All M Series CCT units are compatible with the XL Battery.

Base PowerCharger^{4x4} and Base PowerCharger^{1x1} units not labeled “XL Battery Ready” must be upgraded for use with the XL Battery.

Device to Upgrade	Upgrade P/N
M Series (requires software version 20.00 or higher)	7777-0261
Extreme Pack II	Call your sales representative
Base PowerCharger ^{4x4}	7777-0262
Base PowerCharger ^{1x1}	7777-0263

Service

U.S.A. Customers

Should the ZOLL XL Battery require service, contact ZOLL Medical Corporation Technical Service Department at 1-800-348-9011 (in Massachusetts: 1-978-421-9655)

International Customers

Should the ZOLL XL Battery require service, contact the nearest authorized ZOLL Medical Corporation service center.

